In the claims

1.(Currently Amended) A method of ~~simulating~~ resolving packet traffic congestion and overloaded nodes in a packet-switched network topology, comprising the steps of:

(a) collecting a plurality of traffic logs from the network, the traffic logs being representative of traffic flowing in ~~the~~ an existing network topology ;

(b) indexing the traffic logs by one or more criteria including at least the time of creation;

(c) determining the existence of a packet traffic congestion condition and overloaded topology nodes by creating a first visual histogram of the traffic flow through at least one node in the existing network topology;

~~(c)~~(d) modifying a map of the existing network topology ~~of the network~~ to create a proposed topology; and

~~(d)~~(e) generating a second visual histogram file by replaying the traffic logs through the proposed topology to verify the packet traffic congestion condition and overloaded network nodes have been resolved.

2.(Original) The method of claim 1, wherein the histogram file is a flat file, whereby direct and rapid access to stored data is effected.

3.(Original) The method of claim 1, wherein two histogram files are created, a first histogram being representative of traffic being passed into the network and a second histogram being representative of the traffic being passed from the network.

4.(Original) The method of claim 1, wherein the histogram file is representative of traffic being passed to a host connected to an entry or exit point.

5.(Original) The method of claim 1, further comprising analyzing the traffic logs to determine state information of packets associated with the traffic logs, and updating the histogram file with the state information.

6.(Original) The method of claim 1, wherein the histogram file plots packets

per minute versus time.

7.(Original) The method of claim 1, further comprising broadcasting from a server computer data representative of the histogram file to a client computer.

8.(Original) The method of claim 1, wherein the network is a Mobitex network.

9.(Original) The method of claim 1, further comprising displaying a histogram based on data in the histogram file.

10.(Original) The method of claim 1, further comprising creating at least one histogram for each host of the network.

11.(Original) The method of claim 10, further comprising selecting for display the at least one histogram for a particular host.

12.(Currently Amended) A method of analyzing packet traffic in a packet-switched network, comprising the steps of:

(a) collecting a plurality of traffic logs from a network operations center, the traffic logs being representative of packet traffic passing through an actual ~~configuration~~ topology of the network, wherein each traffic log includes the time the traffic log was created and an associated packet's network entry and exit points for at least one of a host, a node and a link.

(b) storing the traffic logs in a computer such that the traffic logs can be replayed;

(c) generating a first histogram file representative of packet traffic passing through least one of said host, node and link in the existing network topology;

(d) identifying the existence of packet traffic congestion and overloaded nodes;

~~(c)~~ (e) creating a computer file representative of a ~~modified~~ proposed network ~~configuration~~ topology that is different from the existing ~~actual configuration~~ topology of the network;

~~(d)~~ (f) replaying the traffic logs in coordination with the proposed ~~modified~~

network ~~configuration~~ topology; ~~and~~

~~(e)~~ (g) generating a second histogram file representative of packet traffic passing through ~~or via~~ at least one of a host, node and link in the ~~modified~~ proposed network ~~configuration~~ topology; and

(h) visually displaying the second histogram to determine that any packet traffic congestion and overloaded nodes identified in the first histogram have been resolved by the modified topology.

13.(Original) The method of claim 12, wherein the histogram file is a flat file.

14.(Original) The method of claim 12, wherein the network is a Mobitex network.

15. (Original) The method of claim 12, wherein the traffic logs represent traffic in the network over at least a 24 hour period.

16.(Original) The method of claim 12, wherein the histogram plots packets per minute versus time.

17. (Original) The method of claim 12, further comprising broadcasting, from a server computer, data representative of the histogram to a client computer.

18.(Original) The method of claim 12, further comprising displaying a histogram based on data in the histogram file.

19.(Original) The method of claim 12, further comprising creating at least one histogram for each node of the modified network.

20.(Original) The method of claim 12, further comprising selecting for display a histogram for a particular node.

21. (Currently Amended) A system for analyzing packet traffic in a packet-switched

network, comprising:

(a) means for collecting a plurality of traffic logs from a network operations center, the traffic logs being representative of packet traffic passing through an actual ~~configuration~~ topology of the network, wherein each traffic log includes the time the traffic log was created and an associated packet's network entry and exit points; ~~and~~

(b) a computer programmed to (i) store the traffic logs such that the traffic logs can be replayed, (ii) generate a first histogram file representative of packet traffic passing through at least one of a host, a node and a link in the actual network topology, (iii) identify the existence of potential traffic congestion due to an overloaded node, (iv) create a computer file representative of a ~~modified~~ proposed network ~~configuration~~ topology that is different from the actual ~~configuration~~ topology of the network, ~~(iii)~~ (v) replay the traffic logs in coordination with the ~~modified~~ proposed network ~~configuration~~ topology , and ~~(iv)~~(vi) generate a second histogram file representative of packet traffic passing through ~~or via~~ at least one of a host, a node and a link in the ~~modified~~ proposed network ~~configuration~~ topology.

(c) a means to visually monitor for the existence of potential packet traffic congestion due to an overloaded node for at least one of said host, node and link contained in said first histogram file and said second histogram file.

22.(Original) The system of claim 21 wherein the histogram file is a flat file.

23.(Original) The system of claim 21, wherein the network is a Mobitex network.

24.(Original) The system of claim 21, wherein the traffic logs represent traffic in the network over at least a 24 hour period.

25.(Original) The system of claim 21, wherein the histogram plots packets per minute versus time.

26.(Original) The system of claim 21, further comprising means for broadcasting, from a server computer, data representative of the histogram to a client

computer.

27.(Original) The system of claim 21, further comprising means for displaying a histogram based on data in the histogram file.

28.(Original) The system of claim 21, further comprising means for creating at least one histogram for each node of the modified network.

29.(Original) The system of claim 21, further comprising means for selecting for display a histogram for a particular node.

30.(Currently Amended) A computer readable medium containing instructions that when executed by a computer perform acts for ~~simulating~~ resolving packet traffic congestion due to overloaded network nodes in a packet-switched network, the acts comprising:

collecting a plurality of traffic logs from the network, the traffic logs being representative of traffic flowing in the network;

indexing the traffic logs by one or more criteria including at least the time of creation;

determining the existence of a packet traffic congestion condition due to at least one overloaded node by creating a first visual histogram of the traffic through the at least one node in the existing network topology;

modifying a map of the topology of the network to create a proposed topology; ~~and~~

generating a histogram file by replaying the traffic logs through the proposed topology; and

displaying a second histogram based on data in the histogram file to verify the packet traffic congestion condition due to the at least one node has been resolved.

31.(Currently Amended) A computer readable medium containing instructions that when executed by a computer perform acts for analyzing packet traffic in a packet-

switched network, the acts comprising:

collecting a plurality of traffic logs from a network operations center, the traffic logs being representative of packet traffic passing through an actual ~~configuration~~ topography of the network, wherein each traffic log includes the time the traffic log was created and an associated packet's network entry and exit points;

storing the traffic logs in a computer such that the traffic logs can be replayed;

generating a first histogram file representative of packet traffic passing through least one of said host, node and link in the existing network topology;

displaying a histogram visually based on data in the first histogram file to determine the presence of packet traffic congestion due to an overloaded node;

creating a computer file representative of a ~~modified~~ proposed network topology that is different from the actual ~~configuration~~ topology of the network;

replaying the traffic logs in coordination with the ~~modified~~ proposed network topology ~~configuration~~; ~~and~~

generating a second histogram file representative of packet traffic passing through ~~or via~~ at least one of a host, a node and a link in the ~~modified~~ proposed network topology ~~configuration~~; and

displaying a histogram visually based on data in the second histogram file to verify the packet traffic congestion due to an overloaded node has been resolved.